

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/562,369	07/10/2006	Peter John Hastwell	13004.4	6262
Dainle Hefer C	7590 12/04/2007		EXAMINER	
Brinks Hofer Gilson & Lione One Indian Square			BHAT, NARAYAN KAMESHWAR	
Suite 1600 Indianapolis, IN 46204-2033			ART UNIT	PAPER NUMBER
			1634	
				DEL MEDIVA (ODE
			MAIL DATE	DELIVERY MODE
			12/04/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		Application No.	Applicant(s)			
Office Action Summary		10/562,369	HASTWELL ET AL.			
		Examiner	Art Unit			
		Narayan K. Bhat	1634			
Period fo	The MAILING DATE of this communication app or Reply	ears on the cover sheet with the c	orrespondence address			
WHIC - Exter after - If NO - Failu Any r	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DAISIONS of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. Period for reply is specified above, the maximum statutory period we tee to reply within the set or extended period for reply will, by statute, eply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 16(a). In no event, however, may a reply be tim rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).			
Status	·	·				
1)	Responsive to communication(s) filed on					
	• • • • • • • • • • • • • • • • • • • •	action is non-final.				
3)	Since this application is in condition for allowan	ice except for formal matters, pro	esecution as to the merits is			
	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Dispositi	on of Claims		·			
4)🖂	4)⊠ Claim(s) <u>1-38 and 40-52</u> is/are pending in the application.					
	4a) Of the above claim(s) is/are withdrawn from consideration.					
5)	5) Claim(s) is/are allowed.					
	Claim(s) is/are rejected.					
	Claim(s) is/are objected to.					
8)⊠	Claim(s) <u>1-38 and 40-52</u> are subject to restriction	on and/or election requirement.				
Applicati	on Papers					
9) 🗌 🤈	The specification is objected to by the Examiner	•				
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
J. 4 .	Applicant may not request that any objection to the o	drawing(s) be held in abeyance. See	e 37 CFR 1.85(a).			
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority u	ınder 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
اره ن ن	a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received.					
	 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 					
	3. Copies of the certified copies of the priority documents have been received in this National Stage					
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary (PTO-413) Paper No(s)/Mail Date.				
3) Inform	nation Disclosure Statement(s) (PTO/SB/08)	5) 🔲 Notice of Informal P				
Pape	Paper No(s)/Mail Date 6) Other:					

10/562,369 Art Unit: 1634

DETAILED ACTION

Election/Restrictions

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claims 1-33 are drawn to a method of manufacture by micrometer and nanometer scale spatially selective deposition of chemical substances on a substrate.

Group II, claims 34-38 and 40-46 are drawn to a method of manufacturing a flat screen display panel.

Group III, claim 47 is drawn to a flat screen display panel according to method of claim 34.

Group IV, claim 48 is drawn to a flat screen display panel according to method of claim 42.

Group V, claims 49 and 50 are drawn to a flat screen display panel according to method of claim 45.

Group VI, claim 51 is drawn to a DNA array according to method of claim 8.

Group VII, claim 52 is drawn to a micrometer and nanometer scale substrate according to method of claim 1.

10/562,369 Art Unit: 1634

The inventions listed as Groups I and II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: Group I, claims 1, 4 and 9 are drawn to a method of manufacture by micrometer and nanometer scale spatially selective deposition of chemical substances on a substrate whereas group II, claims 34, 42, 44 and 46 are drawn to a method of manufacturing a flat screen display panel. Group III-V inventions are drawn to product by process, i.e., a flat screen display panel formed by different process. Group VI invention is drawn to formation of DNA array product by a process and Group VII invention is drawn to a substrate with discrete space for depositing chemical substance.

The common technical feature as defined by Group VI, linking groups I -VII is the substrate with a distinct location capable of forming electrostatic charge in that region. However, the substrate is taught by Montgomery (USPN 6,280,595 issued Aug. 28, 2001), who teaches electrode arrays on a substrate and applying potential to selective electrodes to generate electrochemical reagents, i.e., protons, that is electrostatic charge on the substrate on the selected regions (Fig. 1a, columns 5 and 6, lines 9-15 and 49-53, columns 12 -14) and further teaches electrodes are of about 1 to 100 micron in diameter (column 22, lines 43-52). Furthermore, Montgomery also teaches an electrochemical synthesis of an oligonucleotide array, i.e., DNA array (columns 5 and 6, lines 57-67 and 1-18, Example 2, columns 28-31). Therefore the technical feature linking group I to VII does not constitute a special technical feature as defined by PCT Rule 13.2, because it does not define a contribution over the prior art. Thus, there is no

10/562,369

Art Unit: 1634

special technical feature linking the recited groups, as would be necessary to fulfill the requirements for unity of invention.

Notice of Possible Rejoinder

The examiner has required restriction between product and process claims.

Where applicant elects claims directed to the product, and the product claims are subsequently found allowable, withdrawn process claims that depend from or otherwise require all the limitations of the allowable product claim will be considered for rejoinder.

All claims directed to a nonelected process invention must require all the limitations of an allowable product claim for that process invention to be rejoined.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103 and 112. Until all claims to the elected product are found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowable product claim will not be rejoined. See MPEP § 821.04(b). Additionally, in order to retain the right to rejoinder in accordance with the above policy, applicant is advised that the process claims should be amended during prosecution to require the limitations of the product claims. Failure to do so may result in a loss of the right to rejoinder. Further, note that the prohibition against double

10/562,369 Art Unit: 1634

patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

Applicant is advised that the reply to this requirement to be complete must include an election of invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

Should applicant traverse on the ground that the inventions are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

10/562,369 Art Unit: 1634

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Narayan K. Bhat whose telephone number is (571)-272-5540. The examiner can normally be reached on 8.30 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ram R. Shukla can be reached on (571)-272-0735. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Narayan K. Bhat, Ph. D.

Examiner

Art Unit 1634

BJ FORMAN, PH.D. PRIMARY EXAMINER